

NC Energy Economy: Fueling with Natural Gas

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Thank you

Our thanks for your support in making utility systems safer and better:

- Recovery of compliance costs (SL 2013-54) helps expedite installation of the latest technology to provide the safest service to customers
- Theft and tampering (SL 2013-88) provide stronger penalties to deter tampering and theft of service
- Underground damage prevention (SL 2013-407) provide clearer mandates, limited exemptions, and stronger penalties for repeat offenders
- Expansion in rural areas (SL 2013-367) authorizes use of certain economic funds for natural gas expansion in rural areas



About Piedmont Natural Gas



We are a regional natural gas utility formed in 1951 and headquartered in Charlotte, NC



We serve over one million natural gas utility customers in North Carolina, South Carolina and Tennessee and one-half million in Georgia through a gas marketing joint venture



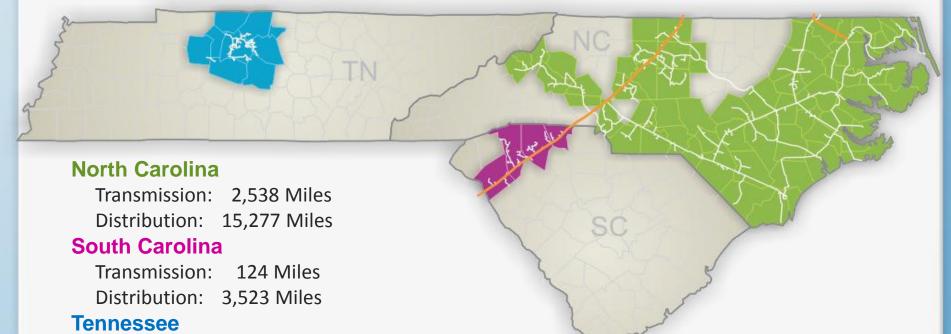
We are one of the fastest growing natural gas utilities in the country and delivered 324 million dekatherms in 2012



We have complementary joint venture energyrelated investments in the Southeast (natural gas pipelines, storage and retail marketing)



Piedmont's Transmission & Distribution System



Distribution: 3,223 Miles
* 2013 North Carolina, South Carolina & Tennessee DOT Reports

Transmission:

82 Miles

Piedmont has an extensive pipeline system in NC with 2,538 miles of high-pressure transmission lines, and 15,277 miles of distribution lines



Why switch to NGVs?

Economics

- Savings of \$1 \$2 per gallon = paybacks of 2 to 6 years for high fuel-use vehicles
- Fewer oil changes, longer engine life, cleaner maintenance bays

Emissions

- Natural gas reduces engine emissions
 - CO by 70%
 - CO₂ by 24%
 - NOx by 75%



Public station at Charlotte Resource Center

Energy Security

 At Piedmont, we have displaced over 1 million gallons of gasoline & diesel in just the last 12 months



Compressed Natural Gas (CNG) for Transportation



- Piedmont has 9 public stations at our larger Resource Centers
- 9 customer-owned stations in our territory, with several very large-load stations planned or under construction
- Piedmont has 222 NGVs currently out of 984 vehicles, or 23%, on our way to 33%
- We estimate at least 250 third-party vehicles filling up at our public stations, and customers with their own stations probably in excess of 100; this number will be increasing rapidly going forward
- AT&T, Frito Lay, City of Charlotte, Waste Management, US Postal Service are biggest public station users
- Big customer-sited fleets are Waste Industries, Freightliner, and soon Frito Lay



Natural gas can be used to fuel almost any kind of vehicle – cars, vans, pickups, buses, tractor-trailers, dump trucks, forklifts, trains, boats, etc.



<u>Cars</u>

- Honda
- Chevrolet
- Fiat
- Hyundai
- Volkswagen





Light-duty Trucks

- Ford
- Dodge
- Chevrolet



Transit Buses

- Motor Coach
- Orion
- New Flyer
- NABI
- •El Dorado



School Buses

- Thomas
- •Blue Bird



Refuse Haulers

- Mack
- Peterbuilt
- Kenworth
- •Crane Carrier
- Autocar
- •American LaFrance



Transport Trucks

- Freightliner
- Peterbilt
- Kenworth
- Volvo



























How can legislators support AFVs?

- Provide an allowance of 2000 pounds in carrying capacity (GVW) for trucks for the incremental weight associated with CNG tanks compared with diesel
- Provide a level playing field among different types of Alternatively Fueled Vehicles (AFVs) by using energy equivalent gallon when it comes to the payment of state road taxes
- In order to stimulate increased OEM production, encourage the Governor to join several other states in signing a MOU pledging to use CNG vehicles in the state fleet
- Develop a program for state, local government and local education agency fleets to take advantage of the lower operating costs and emissions savings of AFVs, perhaps through use of grants, low cost loans or revolving loans

